REMARKS

Claims 1-41 have been canceled and new claims 42-62 have been added. Claims 42-62 are pending in the application. Consideration of the application as amended is requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) are captioned "**Version with markings to show changes made**."

The amendments to the specification and new claims 42-62 are supported at least by text appearing at p. 5, line 5 through p. 15, line 19 of the application as originally filed. No new matter is added by the amendments to the specification or by new claims 42-62. New claims 42-62 distinguish over the art of record and are allowable.

This application is believed to be in condition for allowance and action to that end is requested. The Examiner is requested to telephone the undersigned in the event that the next office action is one other than a Notice of Allowance. The undersigned is available during normal business hours (Pacific Time Zone).

Respectfully submitted,

Dated: June 4, 2002

By: _____
Frederick M. Fliegel, Ph.D.
Reg. No. 36,138

Version with markings to show changes made.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Priority Application Serial No. 09/026,042
Priority Filing Date ..... February 19, 1998
Inventor ..... Sujit Sharan et al.
Assignee ..... Micron Technology, Inc. and Applied Materials, Inc.
Priority Group Art Unit 1763
Priority Examiner ..... P. Hassanzadeh, Ph.D.
Attorney's Docket No. MI22-1902
Title: RF Powered Plasma Enhanced Chemical Vapor Deposition Reactor and Methods of Effecting Plasma Enhanced Chemical Vapor Deposition

37 CFR §1.121(b)(1)(iii) AND 37 CFR §1.121(c)(1)(ii) FILING REQUIREMENTS TO ACCOMPANY PRELIMINARY AMENDMENT

Deletions are bracketed, additions are underlined.

In the Specification

At page 1, before the TECHNICAL FIELD, the following text has been inserted:

CROSS REFERENCE TO RELATED APPLICATION

This patent application is a Divisional Application of U.S. Patent Application Serial No. 09/026,042, filed February 19, 1998, entitled "RF Powered Plasma Enhanced Chemical Vapor Deposition Reactor and Methods of Effecting Plasma Enhanced Chemical Vapor Deposition," naming Sujit Sharan, Gurtej S. Sandhu, Paul Smith and Mei Chang as inventors, the disclosure of which is incorporated by reference. This application is related to U.S. Patent No. 6,159,867, filed August 19, 1999, which is a divisional application of U.S. Patent No. 6,112,697, filed February 19, 1998.

The paragraph extending from p. 11, line 1, to p. 12, line 4, has been amended as shown below.

In accordance with a preferred aspect of the invention, RF power splitter 36 comprises a center tapped transformer in which the output power provided to the respective first and showerhead electrodes is substantially equal in magnitude. Such is desirable when power splitter 36 is used in connection with the PECVD reactor of Fig. 2. In such circumstances, it has been found that the ratio of power which is applied to the electrodes is [proportional] related to surface areas 24, 28 of electrodes 22, 26. Hence, by changing or manipulating the subject surface areas, one can manipulate or select the power ratio and affect the magnitudes of the first and second power components which are "seen" by the respective electrodes to which such power components are applied. In the illustrated and preferred embodiment, such surface areas are different from one another, with the susceptor surface area being larger than the shower head surface area. Such enables a power differential to be developed according to a definable relationship. Such relationship consists of a predefined relative magnitude which is directly proportional to the inverse ratio of the 4th power of the areas of the electrodes. Put another way, by varying the relative surface area ratios as between the susceptor and shower head, a variation in power applied thereto can be effectuated. In the illustrated and preferred embodiment, second electrode or shower head 26 has a surface area which is less than or

smaller than the surface area of the first electrode or susceptor 22. Such results in a higher magnitude of power being applied to the shower head than is applied to the susceptor. This advantageously allows deposition of reactants introduced into chamber 21 in a preferred manner by causing highly energetic species to be drawn toward and in the direction of the electrode supporting the workpiece.

In the Claims

Claims 1-41 have been canceled and new claims 42-62 have been added.

END OF DOCUMENT